



## Centsable 45 mm Contactor Specifications

# 45 MM CENTSABLE CONTACTOR SPECIFICATIONS

## 45mm Centsable Contactor Specification Guide

Installation Voltage	AC	(V)	600 Volts AC					
			9	12	16	25	32	40
Ampere Rating	Max. IEC Amps (AC3) <sup>1</sup>	(A)	9	12	16	25	32	40
	AC1 Thermal Current (GOST) <sup>2</sup>	(A)	30	30	40	45	50	55
Maximum Power (hp) of Three-Phase Motors	200V	(HP)	2	3	3	7.5	10	15
	230/240V	(HP)	3	3	5	7.5	10	15
	400/480V	(HP)	5	7.5	10	15	20	30
	575V	(HP)	7.5	10	15	20	30	40
Maximum Power (hp) of Single-Phase Motors	115V	(HP)	.5	.5	1	2	3	5
	230/240V	(HP)	1	2	3	5	7.5	10
	230/240V	(kw)	2.2	3	4	6.5	10	15
	400V	(kw)	4	5.5	7.5	11	15	20
	440/480V	(kw)	4.7	6.4	9	12.5	18	25
	500V	(kw)	5.5	7.5	10	11	15	20
	690V	(kw)	5.5	7.5	7.5	11	15	20
Short Circuit Protection Fuses Class J UL Rated Fuses	Type 2 Coordination <sup>3</sup>	(A)	20	25	32	40	50	60
Auxiliary Contact Electrical Capacity	A600 <sup>4</sup>							
Coil Voltage Operating / Latching	A.C. Pick-up 85-110% rated control voltage / A.C. Drop-out 20-75% rated control voltage							
Average Coil Power Requirements / Coil current (A) = VAC / Coil Voltage	A.C. Pick-Up (VA) 80-100 / A.C. Sealed (VA) 9-12							
Power Factor	Pick-up .65 / Sealed .35							
Coil Operating Time at Rated Coil Voltage	Pick-up (mS) 10-25 / Drop-out (mS) 6-18							
Maximum Operating Frequency (No-Load Operation)	3000 operations / hour							
Mechanical Durability	10,000,000 operations							
Electrical Durability	1,000,000 operations							
Operating Ambient Temperature	-25 to +55C (-13 to +131F)							
Electrical Protection Degree	IP20 (IP10 for power entry cables)							
Mounting	Screw or 35mm DIN rail							
Wire Sizes	Line / Load		10 AWG		8 AWG			
	Control & Auxiliary Contacts		#12-#14 AWG (standed recommended)					

## Notes:

1. AC3 type loads consist of squirrel cage three-phase motors.
2. AC1 non-inductive or slightly inductive loads. Typically resistive loads (i.e. furnaces, ovens, etc.)
3. Type 2 coordination is a protection category for IEC 60947-4-1. Section 8.2.5.1 specifies that Type 2 coordination requires that, under short circuit conditions, the contactor or switch shall not cause no danger to persons or installation and shall be suitable for further use. The risk of minor contact welding is possible.
4. A600 is a NEMA rating given to switching devices. The A600 rating is particular to 10 amp continuous thermal current with a maximum 60 amp make current and a 6 amp break current at 600 volts AC. Consult NEMA ICS 3-1993, Rev 1 Table 1-8-1 for more detailed specifications.

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**Cutler-Hammer Contactor Specifications**
**45 mm Cutler-Hammer CE15 Contactor Specifications**

Insulation Voltage	AC		(V)	600 Volts AC						
	Max UL Amps (AC3) max	(A)		7	10	12	18	25		
Ampera Rating	AC3 Thermal Current (600V) max	(A)	20	20	20	32	32	32		
			200V	(HP)	1.5	2	3	5		
			230/240V	(HP)	1.5	2	3	5		
			460/480V	(HP)	3	5	7.5	10		
Maximum Power (HP) of Three-Phase Motors		(HP)	5	7.5	10	15	20	25		
			115V	(HP)	0.25	0.5	0.5	1		
			230/240V	(HP)	0.5	1	2	3		
			230/240V	(kW)	1.1	1.5	2.2	4		
Maximum Power (kW) of Three-Phase Motors AC3 Category see 1		(kW)	415/440V	(kW)	2.2	4	6.5	7.5		
			500/550V	(kW)	2.2	4	5.5	7.5		
			500V	(kW)	4	5.5	7.5	11		
			600V	(kW)	1.5	2.2	4	5.5		
Auxiliary Contacts Electrical Capacity			6000 max							
Coil Voltage Operating Limits			A.C. Pick-Up 85-110% Rated Control Voltage / A.C. Drop-Out 20-75% Rated Control Voltage							
Average Coil Power Requirements / Coil current (A) = VA/Coil Voltage			A.C. Pick-Up (VA) 80-100 / A.C. Sealed (VA) 9-12							
Power Factor			Pick-Up .65 / Sealed .35							
Coil Operating Time at Rated Coil Voltage			Pick-Up (mS) 10-25 / Drop-Out (mS) 6-18							
Maximum Operating Frequency (No-Load Operation)			3000 Operations / Hour							
Mechanical Durability			10,000,000 Operations							
Electrical Durability			1,000,000 Operations							
Operating Ambient Temperature			-25 to +65C							
Electrical Protection Degree			IP20 (IP10 for GH15ET and GH15FT)							
Mounting			Screw or 35mm DIN Rail							
Wire Sizes	Line / Load		#10 - #14 AWG Stranded Recommended							
	Control & Auxiliary Contacts		#12 - #14 AWG (Stranded Recommended)							
Line/Load Tightening Torque	Nm (Inch Pounds)		7	7	7	15	15			

## Notes:

1. AC3 type loads consist of squirrel cage three phase motors.
2. AC1 non-inductive or slightly inductive loads. Typically resistive loads (i.e. furnaces, ovens, etc.)
3. Type 2 coordination is a protection category for IEC 60267-4-1. Section 8.3-6.1 specifies that Type 2 coordination requires that under short circuit conditions, the contactor or starter shell cannot open or melt. This must be determined by the user. The rest of motor contact welding is possible.
4. A600 in a NEMA rating gives no switching capacity. The A600 rating in particular is 10amps continuous thermal current with a maximum 60 amp cyclic current and a 6 amp break current at 120 volts AC. See NEMA ICS 5-1993, Sec 7 Table 1-4-1 for more detailed specifications.

**Cutler-Hammer CE15 Series Contactor Part Numbers**

IEC Frame Size	Cutler-Hammer Contactor Model	Part Number	Price	Number of Contacts		Coil Voltage and Frequency	Additional Contacts	
				Main	Auxiliary Contacts Included		Maximum Contact Block Arrangement	Type of Additional Contact Block
					H.O.	N.C.		
45 mm	CE15AN	CE15AN4AB	\$38.25	4			110-120VAC 50-60Hz	Up to two auxiliary contact blocks may be added to CE15 contactors (one per side). Side mount C26KGS3 (1 H.O. and 1 N.C.) C32KGS1 (1 H.O. and 1 N.C.)
		CE15AN4BB	\$38.25	4			220-240VAC 50-60Hz	
	CE15BN	CE15BN4AB	\$39.00	4			110-120VAC 50-60Hz	
		CE15BN4BB	\$39.00	4			220-240VAC 50-60Hz	
45 mm	CE15CN	CE15CN4AB	\$49.75	4			110-120VAC 50-60Hz	
		CE15CN4BB	\$49.75	4			220-240VAC 50-60Hz	
	CE15DN	CE15DN52AB	\$56.25	3	1		110-120VAC 50-60Hz	
		CE15DN52BB	\$56.25	3	1		220-240VAC 50-60Hz	
45 mm	CE15EN	CE15EN52AB	\$53.00	3	1		110-120VAC 50-60Hz	
		CE15EN52BB	\$69.00	3	1		220-240VAC 50-60Hz	
	CE15FN	CE15FN52AB	\$71.50	3	1		110-120VAC 50-60Hz	
		CE15FN52BB	\$71.50	3	1		220-240VAC 50-60Hz	

Note: Holding circuit contact(s) supplied standard: a N.O. auxiliary contact block is mounted on the right-hand side. (On Sizes A-C, contact occupies fourth power pole position-no increase in width.)